FOCUSED SITE INSPECTION PRIORITIZATION
SITE EVALUATION REPORT

STEEL CITY NATIONAL BANK
1751 STATE STREET
CHICAGO HEIGHTS, ILLINOIS

CERCLIS ID NO.: ILD005246590

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SITE ASSESSMENT SECTION
77 West Jackson Boulevard
Chicago, Illinois 60604

Date Prepared:	September 29, 1995
U.S. EPA Region:	5
Contract No.:	68-W0-0037
Technical Direction Document No.:	T05-9503-234
Prepared by:	Ecology and Environment, Inc.
	Patrick Cole
E & E Program Leader:	Steven Skare
Telephone No.:	(312) 663-9415

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1. INTRODUCTION

The Ecology and Environment, Inc., (E & E) Technical Assistance Team (TAT) was assigned by the United States Environmental Protection Agency (U.S. EPA), under Contract No. 68-W0-0037, Technical Direction Document (TDD) No. T05-9503-234, to evaluate the Steel City National Bank site in Chicago Heights, Cook County, Illinois, as a potential candidate for the National Priorities List (NPL). E & E performed Focused Site Inspection Prioritization (FSIP) activities to determine whether, or to what extent, the site poses a threat to human health and the environment. This FSIP report presents the results of E & E's evaluation and summarizes the site conditions and targets pertinent to the migration and exposure pathways associated with the site. Background information was obtained from a Preliminary Assessment (PA) report (Illinois Environmental Protection Agency [IEPA] 1984), a Site Inspection (SI) report (E & E 1984), and U.S. EPA files.

This report is organized into six sections, including this introduction. Section 2 describes the site and provides a brief site history. Section 3 provides information about previous investigations conducted at the site. Section 4 provides information about the four migration and exposure pathways (groundwater migration, surface water migration, soil exposure, and air migration). Section 5 is a summary of the FSIP. References used in the preparation of this report are listed in Section 6.

2. SITE DESCRIPTION AND HISTORY

The Steel City National Bank site is located at 1751 State Street, in Chicago Heights, Cook County, Illinois (NW1/4 NW1/4 sec. 27, T. 35 N., R. 14 E.). Coordinates for the site are latitude 41°30'05" North and longitude 87°37'05" West (IEPA 1984). It is currently closed. The site is bordered by the Elgin, Joliet, and Eastern Railroad right-of-way to the north, State Street to the west, Third Creek to the east, and a service road to the south. The area surrounding the site is primarily industrial. The site location is shown on Figure 2-1.

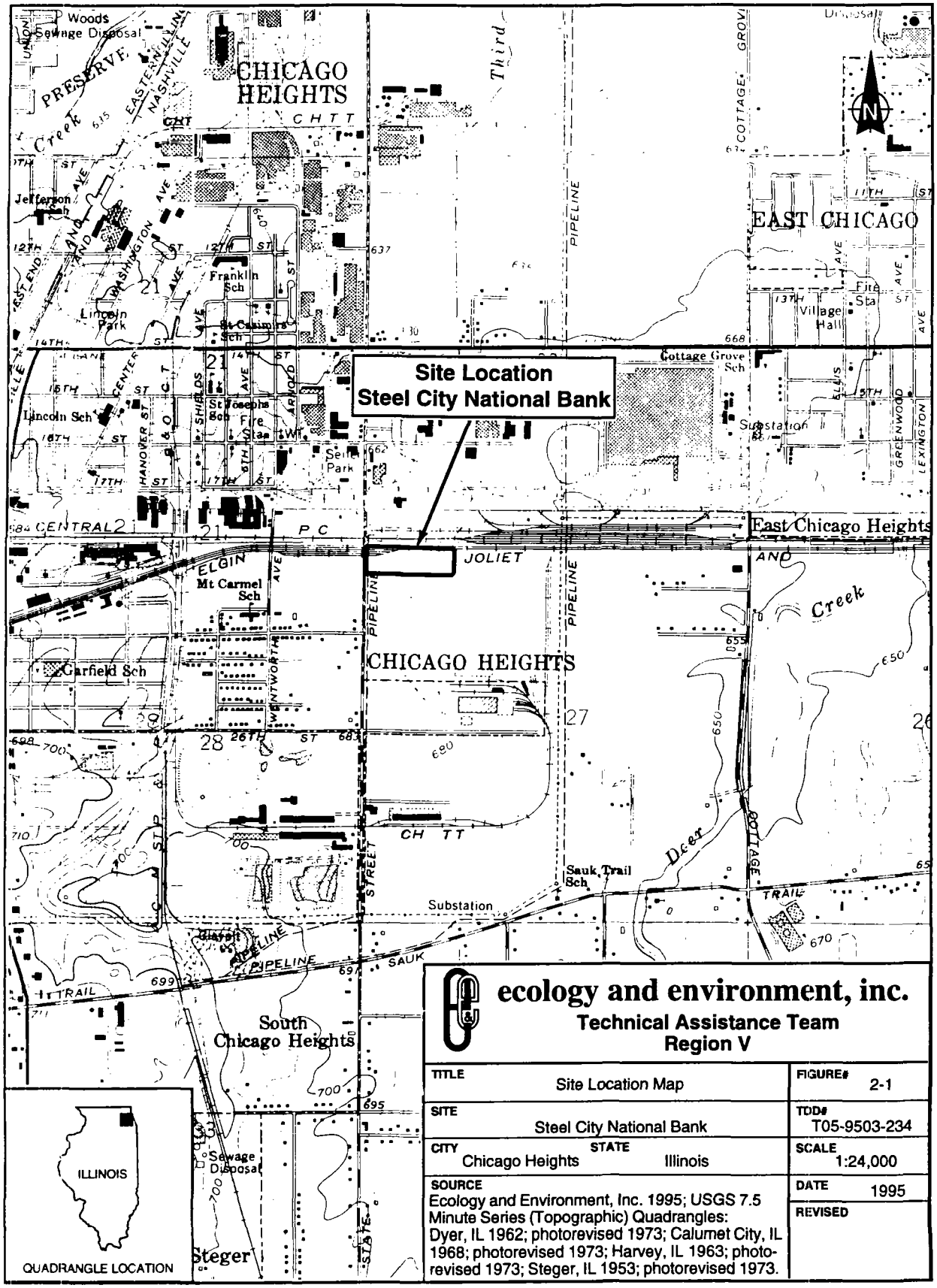
The site is situated on approximately 10 acres of land. Site features are shown in Figure 2-2. Third Creek, the nearest surface water body, at its nearest point to the site, is located approximately 0.1 mile east of the site. The site is fenced around the whole perimeter of the property. A gate in the northwest corner allows access from State Street. East of the entrance is the office, plant, dross pile, and settling pond (Klopke and Kallis 1981).

When in operation, the site was known as Hall Aluminum Company, an inactive aluminum and zinc reclaimer facility. It is not known when operations began, but the facility closed sometime after 1984. When the facility was in operation, quench water from the reclaiming process was discharged to an on-site drainage ditch, which was lined with lime to adjust the pH of the wastewater. The ditch drained into an on-site settling pond, which was allowed to overflow into Third Creek. During the March 29, 1984, site investigation, the IEPA collected samples from the wastewater at the discharge point, prior to entering the lime-lined drainage ditch. Chemical analysis of these samples revealed a high solid content and a pH of approximately 0.7. IEPA also observed large uncontained dross piles consisting of the skimmings of the aluminum smelting.

In May 1984 the Hall Aluminum Company switched to a contained system for neutralizing wastewater prior to discharge to the holding ponds (E & E 1984). On July 10, 1984, Hall Aluminum Company filed a Notification of Hazardous Waste Form with the IEPA. Chemical testing of samples collected from the dross piles by Gulf Coast Laboratories and witnessed by Ms. Bonnie Eleder of the IEPA in 1985 revealed no hazardous substances in

the piles. Letters dated July 26 and August 19, 1985, from the IEPA to the Hall Aluminum Company stated that analytical data indicated that neither the waste pile nor the surface impoundment was considered hazardous (Greenberg 1985; Kawatachi 1985). The letters also stated that hazardous waste is neither generated, treated, nor stored at the facility. The filing of a Notification of Hazardous Waste Activity Form was a protective filing; it was later determined the Hall Aluminum Company was not required to have a Hazardous Waste Permit (Kawatachi 1985).

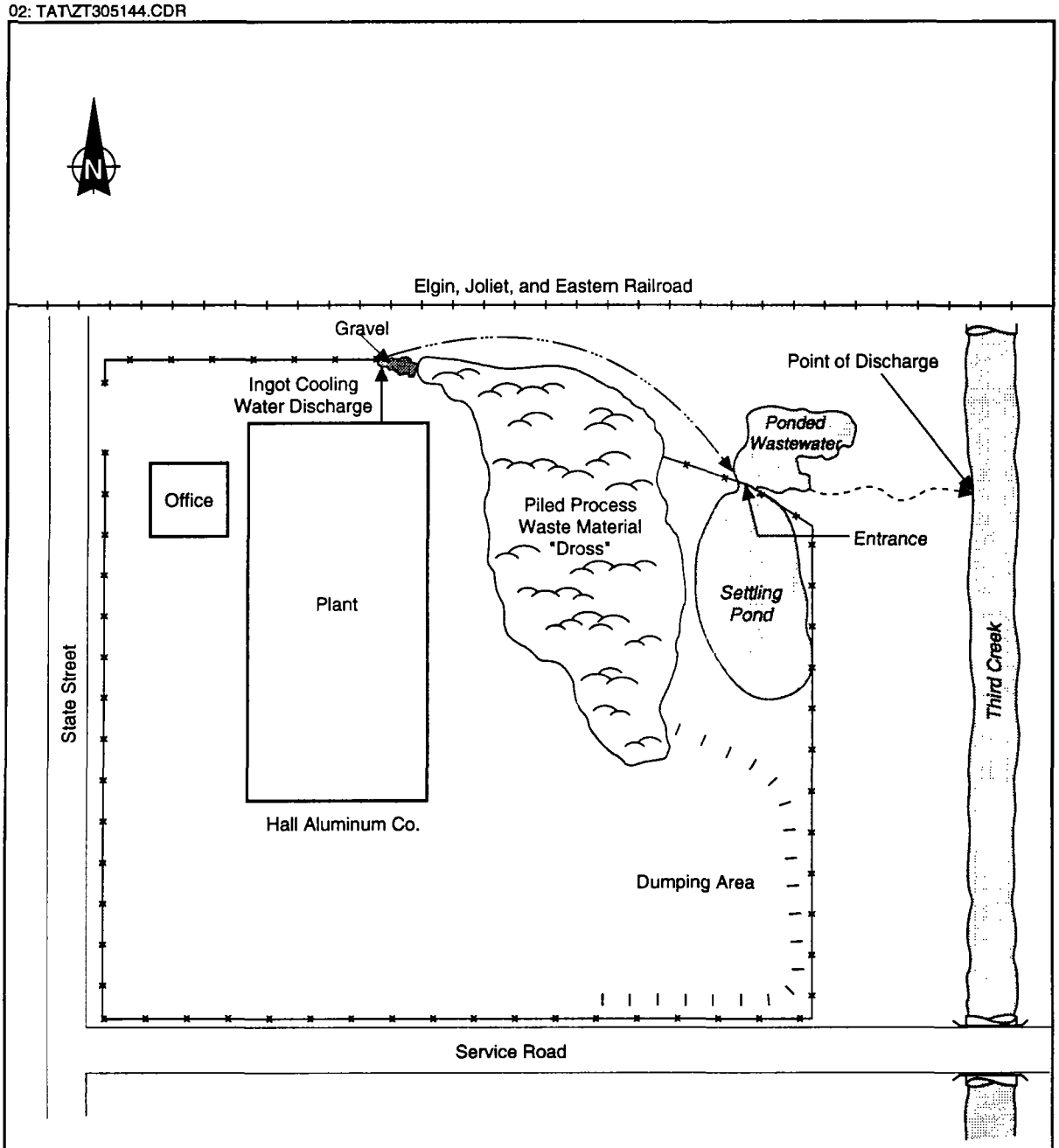
The facility did not have Resource Conservation and Recovery Act (RCRA) or National Pollutant Discharge Elimination System (NPDES) permits.



ecology and environment, inc.
Technical Assistance Team
Region V

TITLE: Site Location Map	FIGURE#: 2-1
SITE: Steel City National Bank	TDD#: T05-9503-234
CITY: Chicago Heights STATE: Illinois	SCALE: 1:24,000
SOURCE: Ecology and Environment, Inc. 1995; USGS 7.5 Minute Series (Topographic) Quadrangles: Dyer, IL 1962; photorevised 1973; Calumet City, IL 1968; photorevised 1973; Harvey, IL 1963; photorevised 1973; Steger, IL 1953; photorevised 1973.	DATE: 1995 REVISED:

02: TAT\ZT305144.CDR



LEGEND:

- Fence
- Drainage path of process waste stream
- Path of discharge to Third Creek

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Technical Assistance Team
Region V

TITLE: Site Features Map	FIGURE#: 2-2
SITE: Steel City National Bank	TDD#: T05-9503-234
CITY: Chicago Heights STATE: Illinois	SCALE: Not to Scale
SOURCE: Ecology and Environment, Inc.	DATE: 1995 REVISED:

3. PREVIOUS INVESTIGATIONS

The site was initially discovered through an IEPA inspection on November 19, 1981 (Klopke and Kallis 1981). Chemical analyses of surface water samples collected from the 1981 IEPA site inspection revealed a release of cadmium (0.02 milligram per liter [mg/L]), copper (0.08 mg/L), manganese (0.54 mg/L), zinc (0.4 mg/L), and aluminum (8.4 mg/L) to the State Street Ditch, which was later known as Third Creek. Two additional samples were collected from the discharge point prior to processing and discharge to the holding pond. The process waste stream had a noticeable ammonia odor, was slightly heated, and appeared highly turbid during the inspection. All samples collected during the site inspection were analyzed for metals. None of the samples were analyzed for volatile organic compounds.

On March 29, 1984, the IEPA conducted a PA of the Hall Aluminum Company site. During the 1984 PA, Bonnie Eleder of the IEPA observed heavy black smoke being emitted to the air due to the in operation of one of the baghouse blowers. White emissions were also observed due to an improperly operating baghouse. Results from samples collected during the 1981 IEPA site inspection indicated a pH of 0.7 for the sample collected from the process stream prior to treatment with lime and subsequent discharge to the holding pond.

Another inspection was conducted by the IEPA and an observation report was written on May 16, 1984. The purpose of the inspection was to collect samples of the dross pile and the discharge. It was discovered that the cooling water was no longer discharged to the holding pond. A recycling system had been in use since May 7, 1984. The system consisted of a 20,000-gallon tank and two pipelines connected with the aluminum processing area. It was a closed system in which water was pumped from the tank to the area for cooling the ingots. The water then drained to a sump where it was pumped back to the tank.

An SI was performed by the E & E FIT on September 6, 1984. During the 1984 SI, FIT members were denied permission to conduct a site inspection. The SI form (EPA Form 2070-13) was completed using file information and an off-site inspection. At the time of the SI, residents within a 4-mile radius of the site obtained their drinking water from groundwater

sources. According to the SI, Lake Michigan water was to replace groundwater by November 1984 for drinking purposes. The dross piles appeared to have extended beyond the site fence.

4. MIGRATION AND EXPOSURE PATHWAYS

This section describes the four migration and exposure pathways associated with the Steel City National Bank site. Section 4.1 discusses the groundwater migration pathway; Section 4.2 discusses the surface water migration pathway; Section 4.3 discusses the soil exposure pathway; and Section 4.4 discusses the air migration pathway.

4.1 GROUNDWATER MIGRATION PATHWAY

This section discusses regional geology and soils, groundwater releases, and targets associated with the groundwater migration pathway at the site.

4.1.1 Geology and Soils

The Steel City National Bank site is located on Quaternary glacial sediments ranging in depth from approximately 40 to 100 feet below ground surface (BGS). Silurian dolomite directly underlies the Quaternary sediments and ranges in thickness from approximately 355 to 405 feet. Maquoketa shale underlies the Silurian dolomite and ranges in thickness from approximately 95 to 285 feet. The Glenwood-St. Peter group of the Ordovician system underlies the Maquoketa group, and the Ironton-Galesville group of the Cambrian system underlies the Glenwood-St. Peter group. The Maquoketa group acts as an effective barrier separating the glacial sediments and Silurian dolomite from underlying layers.

The residents of Chicago Heights obtain drinking water from a public water system that draws water from Lake Michigan. Groundwater is found in the glacial sediments at depths between 10.5 and 57 feet BGS, in the dolomite between 200 and 450 feet BGS, and in the Ironton-Galesville group at 1,191 feet BGS (Lombardi 1987). Groundwater flow in the area of the site is to the south-southwest (E & E 1984).

4.1.2 Groundwater Releases

A potential exists for a release of hazardous substances from the Steel City National Bank site to groundwater. Evidence of waste mismanagement exists. There are no engineering controls to prevent a release of contaminants to groundwater. Analytical results from a 1985 sampling revealed that the waste was not hazardous. This was the only testing done on the dross piles and lead was the only contaminant tested for. Cadmium (0.02 mg/L), copper (0.08 mg/L), manganese (0.54 mg/L), zinc (0.4 mg/L), and aluminum (8.4 mg/L) were all found in surface water samples at concentrations greater than three times background readings (a background sample was collected 600 feet upstream) (IEPA 1981).

4.1.3 Targets

Approximately 92,500 of the 122,000 residents within a 4-mile radius of the site based on straight-line distance obtain drinking water from private and municipal well systems that obtain groundwater for drinking purposes. The remaining 29,500 residents obtain drinking water from surface water intakes in Lake Michigan, which is located approximately 15 miles northeast of the site (CHWD 1995; PFVO 1995). Pumping information for some of these wells is provided in Appendix B.

4.2 SURFACE WATER MIGRATION PATHWAY

It is likely that a release to surface water has occurred because surface water samples collected from Third Creek in 1981 by the IEPA contained cadmium (0.02 mg/L), copper (0.08 mg/L), manganese (0.54 mg/L), zinc (0.4 mg/L), and aluminum (8.4 mg/L) at concentrations greater than three times background. A sediment sample was taken, but no background sample was obtained.

Third Creek, the nearest surface water body, is assumed to be a recreational area used for fishing. The site is not located inside the 500-year floodplain of Third Creek, which drains into Deer Creek approximately 3 miles north of the site (E & E 1984). A wetland is located 1.5 miles north of the site (Soderberg 1991). There are no engineering controls to prevent contaminants from being released to surface water. No water intakes exist along Third Creek.

4.3 SOIL EXPOSURE PATHWAY

A release of hazardous substances from the Steel City National Bank site to surrounding soils is possible based on conditions at the time of the SI. The dross piles were determined to be nonhazardous by the IEPA based on 1985 sampling results (Greenburg

1985; Kawatachi 1985). However, the dross piles were only tested for lead. Cadmium (0.02 mg/L), copper (0.08 mg/L), manganese (0.54 mg/L), zinc (0.4 mg/L), and aluminum (8.4 mg/L) were all found in surface water samples at concentrations greater than three times background readings. It is possible that the contaminants could have come from the dross piles, but it could not be confirmed. There are no engineering controls to prevent migration of contaminants from the soil, but the site is located in an industrial area with no residents within 0.5 mile of the site. There is no direct route for contaminants to migrate to residential areas.

The site is completely fenced around the perimeter of the property. The nearest residences are located 0.5 mile west and southwest of the site with a total of 7,100 residents within 1 mile of the site based on a straight-line distance. Wetlands exist within 4 miles of the site with the closest being 1.5 miles north of the site. The site has been closed since 1984, and therefore no workers are present on site. There are no schools, daycare centers, or residences within 200 feet of the site.

4.4 AIR MIGRATION PATHWAY

A release of hazardous substances to air is likely to have occurred based on conditions at the time of the SI. In 1984 black smoke was observed. This release was due to baghouse upsets. There has been no monitoring or sampling of the air at the site. The plant did have a baghouse when in operation.

The Steel City National Bank site has been closed since 1984. There are no workers presently on site. No records of complaints regarding odors are known to exist. The population surrounding the site is relatively high, with 122,000 residents living within 4 miles of the site. There is a wetland 1.5 miles from the site.

5. SUMMARY

E & E has evaluated the Steel City National Bank, which has been an inactive facility since approximately 1984. The site has served as an aluminum and zinc reclaiming facility under the name of Hall Aluminum Company. While the facility was in operation, quench water from the reclaiming process was discharged to an on-site drainage ditch, which was lined with lime to adjust the pH of the wastewater. The ditch drained into an on-site settling pond. Dross piles consisting of the skimmings of the aluminum smelting were also on site. Samples were obtained from the dross piles in 1985 to determine if there was a possibility of soil and surface water contamination due to runoff from the pile. The dross piles were determined to be nonhazardous by the IEPA. However, the dross piles were only tested for lead. There is a possibility that contaminants in surface water could have come from the dross piles.

Approximately 92,500 of the 122,000 residents within a 4-mile radius of the site obtain drinking water from private and municipal well systems which obtain groundwater for drinking purposes. The remaining 29,500 residents obtain drinking water from surface water intakes in Lake Michigan, which is located approximately 15 miles northeast of the site.

A release of hazardous substances to surface water is likely based on conditions at the time of the SI. Third Creek, the nearest surface water body, is located approximately 0.1 mile east of the site and drains into Deer Creek approximately 3 miles north of the site. Samples collected from the creek in 1981 by the IEPA revealed cadmium (0.02 mg/L), copper (0.08 mg/L), manganese (0.54 mg/L), zinc (0.4 mg/L), and aluminum (8.4 mg/L), all at greater than three times background levels.

The Steel City National Bank site is fenced and is located approximately 0.5 mile east and northeast of residences. No schools or daycare facilities are located within 200 feet of the site. A wetland is located 1.5 miles from the site. Soil exposure by nearby residents is not very likely due to the fact that the site is located in an industrial area with no direct route for contaminants to migrate off site.

A release of hazardous substances to air is likely to have occurred. In 1984 heavy black smoke from baghouse upsets were observed. No workers are currently employed on site. No records of complaints regarding odors are known to exist.

6. REFERENCES

References listed here that are not included in Appendix C: documents that are currently available within U.S. EPA files; copyrighted documents that are currently available in E & E's library; maps produced by either the United States Geologic Survey or the Illinois State Geologic Survey; and documents that are created by the various state agencies for public use.

Chicago Heights Water Department (CHWD), September 8, 1995, personal communication, Patrick Cole, Ecology and Environment, Inc., Buffalo, New York.

Ecology and Environment, Inc., (E & E), September 10, 1984, *Site Inspection Report for Hall Aluminum Company*, Chicago Heights, Illinois, U.S. EPA ID No. ILD005246590, Chicago, Illinois.

Greenberg, J., July 26, 1985, *Withdrawal Notification for Hall Aluminum Company*, Illinois Environmental Protection Agency, Chicago Heights, Illinois.

Illinois Environmental Protection Agency (IEPA), April 26, 1984, *Preliminary Assessment Report for Hall Aluminum Company*, Chicago Heights, Illinois.

_____, May 16, 1984, Observation Report, Hall Aluminum Company, Chicago Heights, Illinois.

Kawatachi, A., August 19, 1985, *Letter to Donald Retsky, President of Hall Aluminum Company,* Illinois Environmental Protection Agency, Chicago Heights, Illinois.

Klopke, D., and C. Kallis, November 19, 1981, *Inspection Notes for Hall Aluminum Company*, Illinois Environmental Protection Agency, Chicago Heights, Illinois.

Lombardi, D., 1987, *Documentation Records for Hall Aluminum Company*, Ecology and Environment, Inc., Chicago, Illinois.

Park Forest Village Office (PFVO), September 11, 1995, personal communication with Patrick Cole, Ecology and Environment, Inc., Buffalo, New York.

Soderberg, P., September 20, 1991, *ESI Prioritization Questionnaire for Steel City National Bank*, Chicago Heights, Illinois.

APPENDIX A

1981 IEPA ANALYTICAL DATA

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (2H)

SPECIAL ANALYSIS FORM 02961 NOV20

Time Collected 11:40 A.M. Sub-Basin Thorn Creek

Date Collected 11/19/81 Collector Don Klopke / Chris Hallis

Facility Name: Hall Aluminum Co. Facility Number: File Town Chicago Heights

Stream Name(s) State Street Ditch Stream Code:

Source of Sample: (Exact Location)

Sample collected approximately 100 feet downstream of HALL Aluminum Co. discharge point. Just upstream of the nearby culvert. Collected from the State Street Ditch

Physical Observations, Remarks:

RECEIVED

FEB 3 - 1982

Flow	Field Dissolved Oxygen	Field pH	Field Temp.

0.003	Arsenic		Coliform/100ml	8	BOD
0.0	Barium		Fecal Coliform 100 ml	31	COD
1.2	Boron		Fecal Strep 100 ml	1081	TS/EC
0.02	Cadmium		Algae (Total) /ml	130	Susp. Solids
0.08	Copper	9.9	Ammonia (N)	45	Vol. Susp. Solids
0.00	Chromium (tri)		Organic Nitrogen (N)	8.0	pH (units)
0.00	Chromium (hex)	1.9	Nitrate + Nitrite (N)		Turbidity (JTU)
0.6	Iron (Total)	1.7	Phosphorus (P)		Hardness
	Iron (Dissolved)	320	Chloride		Alkalinity
<0.03	Lead		Fluoride		Total Acidity
0.54	Manganese	335	Sulfate		Free Acidity
<0.05	Mercury (ppb)	0.01	Cyanide		Oil
0.0	Nickel		MBAS	1420	Residue on Evaporation Other (Specify)
<0.001	Selenium	0.007	Phenol (ppb)	8.4	Aluminum
0.00	Silver				
0.4	Zinc				

Results in mg/l unless otherwise noted.

Transported by: DJK
Received by:
Transported by: CK
Received by:

FOR LAB USE ONLY
Lab Number: C002961 Rec'd by: M. J[illegible]
Date sample rec'd: 11-20-81 Time: 1[illegible]
Date analysis completed:
Date results forwarded: FEB -2 1982
Total Tests requested: ____ Tests run: ____
Lab Section: Chicago Supervisor: [signature]

100% Recycled Paper
IL532-0546
LABS 3 3/73

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

SPECIAL ANALYSIS FORM

02960 NOV20

Time Collected 11:20 A.M. Sub-Basin Thorn Creek

Date Collected 11/19/81 Collector Don Klopfer / Chris Kallis

Facility Name: Hall Aluminum Co. Facility Number: File Town: Chicago Heights

Stream Name(s): State Street Ditch Stream Code:

Source of Sample: (Exact Location)

Sample collected approximately 600 feet upstream of the Hall Aluminum Co. discharge point. Collected from the State Street Ditch

Physical Observations, Remarks:

FEB 3 - 1982

Flow	Field Dissolved Oxygen	Field pH	Field Temp.

0.003	Arsenic		Coliform/100ml	8	BOD
0.0	Barium		Fecal Coliform 100 ml	30	COD
1.2	Boron		Fecal Strep 100 ml	927	TS/EC
0.00	Cadmium		Algae (Total) /ml	11	Susp. Solids
0.00	Copper	6.2	Ammonia (N)	3	Vol. Susp. Solids
0.00	Chromium (tri)		Organic Nitrogen (N)	8.4	pH (units)
0.00	Chromium (hex)	1.7	Nitrate + Nitrite (N)		Turbidity (JTU)
0.5	Iron (Total)	1.7	Phosphorus (P)		Hardness
	Iron (Dissolved)	110	Chloride		Alkalinity
<0.03	Lead		Fluoride		Total Acidity
0.14	Manganese	355	Sulfate		Free Acidity
<0.05	Mercury (ppb)	0.02	Cyanide		Oil
0.0	Nickel		MBAS	1160	Residue on Evapora. Other (Specify)
<0.001	Selenium	0.007	Phenol (ppb)	0.0	Aluminum
0.00	Silver				
0.0	Zinc				

Results in mg/l unless otherwise noted.

Transported by: DNR

Received by:

Transported by: C Kallis

Received by:

FOR LAB USE ONLY

Lab Number: C002960 Rec'd by:

Date sample rec'd: 11-20-81 Time: 1600

Date analysis completed: FEB -2 1982

Date results forwarded:

Total Tests requested: Tests run

Lab Section: Chem Supervisor: Blanchard

IL532-0546
LABS 3 3/73

GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones (312) 534-5200 (219) 885-7077 (815) 723-7533

ANALYTICAL REPORT

TO: Charles Licht Engineering
P.O. Box 315
Olympia Fields, Il 60461

ATTN: Mr. Charles Licht

DATE: April 1, 1985

RE: Hall Aluminum Soil #39
Sample Date: 01/18/85
GCL# 58400

PARAMETERS	RESULTS	
Lead, E.P. Toxicity	3.41	mg/l

Approved John Boudreau Analyst _____ Date 04/04/85

APPENDIX B

WELL LOGS

Fac. No. 016 0720 PUBLIC WATER SUPPLY DATA SHEET

REFERENCE
SITE NAME
SITE ID

County and Supply EAST CHICAGO HEIGHTS Cook County

Date Inspected March 12, & 22, 1982 Plant phone ----

Certified Operator Amos White 3091 · *C* Phone

Other officials (Title) Phone

Saul Beck, Mayor Phone 758-3131 Village Hall

Emergency Address Utility Company Phone 758-1700 Utility Company

Send mail to Village Hall, 1343 Ellis Avenue, East Chicago Heights, Illinois 60411

Interviewed Amos White, Water Supply Operator

Brief description of supply: Water obtained from seven drilled wells (2 wells #1 and #2 maintained as standby (cl_2 and fluoride treatment only) and 3 wells (#3, #6 and #7 pump to Chicago Heights exclusively), chlorinated #3, #4, #5, #6 and #7. Fluoridate all wells except #3. Phosphate added at #3, #6, and #7. One pressure storage tank (at #5 only). One elevated tank floats on the system. Wells #3, #6 and #7 are leased to a Utility Company which in turn sells water to Chicago Heights. Amos White maintains the entire system, both municipal and private.

No. of services: Direct ± 1700 - 3 % metered

Satellite Chicago Heights is % metered

Adequacy of Supply

Annual Pumpage 1225 M* Gal. 1981
Av. Daily pumpage 3.36M Gal. Max. av. Daily Pumpage Gal.
Est. Population Av. Daily per Capita Consumption 172** Gal.
Time Required to Produce Av. Daily Consumption Hrs.
Time Required to Produce Mx. Av. Daily Consumption Hrs.
Large Consumers Av. Gal./Day

Emergency water and Power Sources:

Emergency inter-connection: Chicago Heights

*Including Chicago Heights (883.3M)

**Not including Chicago Heights

CRB:ted
PWS 59 7/79

REFERENCE #4
SITE NAME Hall Aluminum Co
SITE ID D0052465 90

SUMMARY OF PUMPING [redacted] PUBLIC WATER SUPPLY

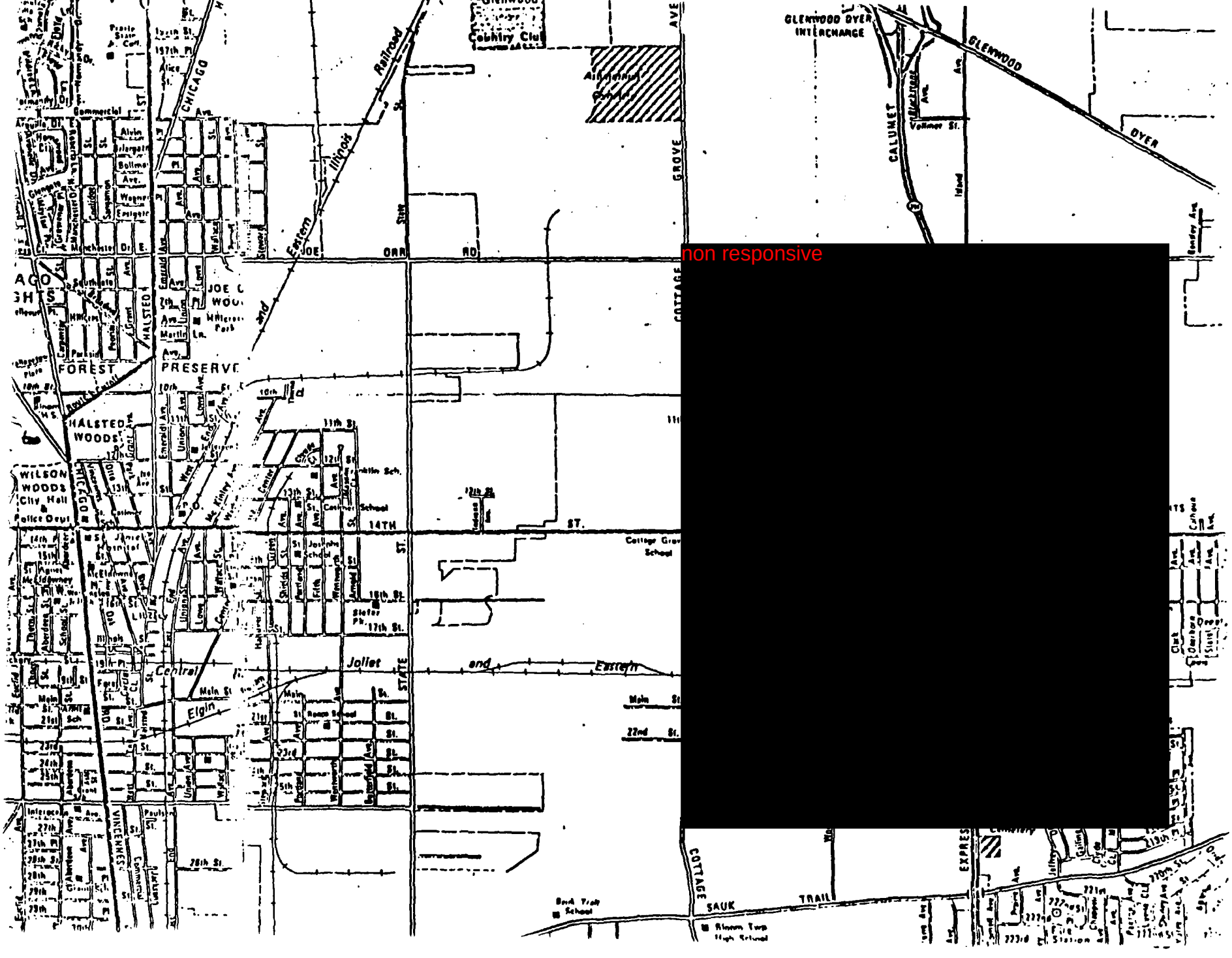
PUMPING CAPACITY AND WATER LEVELS ---- SOURCES

Year	1979	1980				1981			
Quarter	4th	1ST	2nd.	3rd.	4th.	1ST	2nd	3rd	4th
Measurements as feet above sea level									
Well or Intake # 1 Location non responsive [redacted]									
Gpm. 1968 - 60 GPM				200					
Nonpumping Level 1953 - 13'									
Pumping Level 1953 - 80'									
Pump setting									
Casing seat & T.D. 12" Cemented Set at +609' T.D +157'±									
Specific Capacity									
Well or Intake # 2 Location non responsive [redacted]									
Gpm.				100					
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D. 16" Casing Set @ +558' Total Depth +559'									
Specific Capacity									
Well or Intake # 3 Location non responsive [redacted]									
Gpm.				1000					
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D. 16" Set at -83' Total Depth -1191'									
Specific Capacity									
Well or Intake # 4 Location non responsive [redacted]									
Gpm.				500					
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D. 19" Set at +576'									
Specific Capacity									
Well or Intake # 5 non responsive [redacted]									
Gpm.				500					
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D. 12" Set at +548' T.D +164'									
Specific Capacity									

SUMMARY OF MONITORING East Chicago Heights PUBLIC WATER SUPPLY

PUMPING CAPACITY AND WATER LEVELS ---- SOURCES

Year	1979	1980				1981			
Quarter	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th
Well or Intake # 6 Location [redacted]				Measurements as feet above sea level					
Gpm.				730					
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.	20" set at +560'				T.D+175'				
Specific Capacity									
Well or Intake # 7 Location [redacted]									
Gpm.				850					
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.	20" set at +560'				T.D + 175'				
Specific Capacity									
Well or Intake # Location				Elevations					
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									
Specific Capacity									
Well or Intake # Location				Elevations					
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									
Specific Capacity									
Well or Intake # Location				Elevations					
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									


non responsive
GLENWOOD DYER INTERCHANGE
GLENWOOD
DYER
CALUMET
GROVE
COTTAGE
JOE ORR RD
Eastern Illinois Railroad
CHICAGO
HALSTED
FOREST PRESERVE
HALSTED WOODS
WILSON WOODS
City Hall
Police Dept
14TH ST.
Joliet and Eastern
Central
Elgin
STATE
Main St
22nd St.
SAUK TRAIL
Cobinry Club

INVENTORY	ls & Pumps	ndby Power	der Mains	Chlorine	Fluoride	Phosphate	hange	moval	shing hydrants	kflow preventor	ar Wells	Ser. Pumps	ndby Power	s - 1000s ft.	rconnections	ated Tanks	sure Storage	nd Storage	ter Pumps	dby Power	ribution Valve	ant Valves	
etail in "CSOM"																							
umber of Units	7	--	--	7	6	3	--	--	145 +4 under construction		--	--	--		1	1	1	--	--	--	11		

Well Capacity:

#1	200* gpm	#7	850 gpm
#2	100* gpm	#8	gpm
#3	1000 gpm	#9	gpm
#4	500 gpm	#10	gpm
#5	550 gpm	#11	gpm
#6	730 gpm	#12	gpm

Total Well Capacity 5.6M gpd.
Total Storage Capacity 115K gal.
Iron Filter Capacity gpd

High Service Pump Capacity gpd
Elevated Storage 100K gal.
Pressure Storage 15K gal.
Ground Storage gal.

*STANDBY

Emergency Power: None

In the course of the evaluation, the following conditions which appear to constitute violations of the Environmental Protection Act or related public water supply rules and regulations were noted:

EQUIPMENT

Well #1 No chlorine scale

Well #2 No chlorine scale. Chlorine not isolated. No exhaust fan.

Well #3 Chlorine not totally isolated. No chlorine scale.

Well #4 No exhaust fan.

Well #5 Master meter broken.

MONITORING

1. Operating records are not submitted.
2. Inadequate number of bacteriological samples submitted. Required 6 from distribution, submitted 5.
3. Chlorine residual not tested at the time of bacteriological sample collection.
4. No recent mineral analysis for distribution system.
5. Inconsistent fluoride levels in distribution.
6. No chlorine residual present in distribution on March 22, 1982. Samples taken at Village Hall and Utility office.
7. No bacteriological samples received for sampling period of January 4 to January 31, 1982.

PUBLIC WATER SUPPLY DATA SHEET

County and Supply STEGER Cook County

Date Inspected November 25, 1980 Plant phone 754-4044

Operator Joe Janusek *C* #2190 Phone 755-3888 (P.W. Garage)

Other officials (Title) Phone 754-3395 Village Hall

Louis Sherman, Village President Phone

Emergency Address ---- Phone

Send mail to Village Hall, Steger, Illinois 60475

Interviewed Gilkison, Superintendent of Public Works

Joe Janusek (COIRC)

Brief description of supply: Water obtained from three (3) drilled wells. All wells chlorinated, fluroide fed at #3. Wells discharge to system upon which two (2) elevated tanks float.

No. of services: Direct 2400 - 100 % metered

Satellite ---- - --- % metered

Adequacy of Supply

Annual Pumpage 1979 384.6 M Gal.
Av. Daily pumpage 1.05 M Gal. Max. av. Daily Pumpage ---- Gal.
Est. Population 9500 Av. Daily per Capita Consumption 110 Gal.
Time Required to Produce Av. Daily Consumption --- Hrs.
Time Required to Produce Mx. Av. Daily Consumption --- Hrs.
Large Consumers D'Amico Macaroni 75K Av. Gal./Day

Emergency water and Power Sources: South Chicago Heights - interconnection at 3 different locations.

CRB:ted
PWS 59 7/79

INVENTORY	s & Pumps	dby Power	er Mains	Chlorine	Fluoride	Phosphate	ange	oval	ning hydrants	Flow preventor	r Wells	Ser. Pumps	dby Power	s - 1000s ft.	connections	ted Tanks	sure Storage	d Storage	er Pumps	lby Power	ibution Valve	ns
Detail in "CSOM"																						
Number of Units	3	1	--	2	1	--	--	--	225	1	--	--	--	99	1	2	--	--	--	--	175	225

Well Capacity:

#1	325 gpm	#7	gpm
#2	625 gpm	#8	gpm
#3	375 gpm	#9	gpm
#4	--- gpm	#10	gpm
#5	--- gpm	#11	gpm
#6	--- gpm	#12	gpm

Total Well Capacity 1.91 M gpd.
Total Storage Capacity 0.5M gal.
Iron Filter Capacity ---- gpd

High Service Pump Capacity --- gpd
Elevated Storage 0.5M gal.
Pressure Storage --- gal.
Ground Storage --- gal.

Emergency Power: 1 gasoline engine

In the course of the evaluation, the following conditions which appear to constitute violations of the Environmental Protection Act or related public water supply rules and regulations were noted:

1. Fluoride levels out of standard January through September 1980.

2. Fluoride fed not reported on monthly reports of operation.

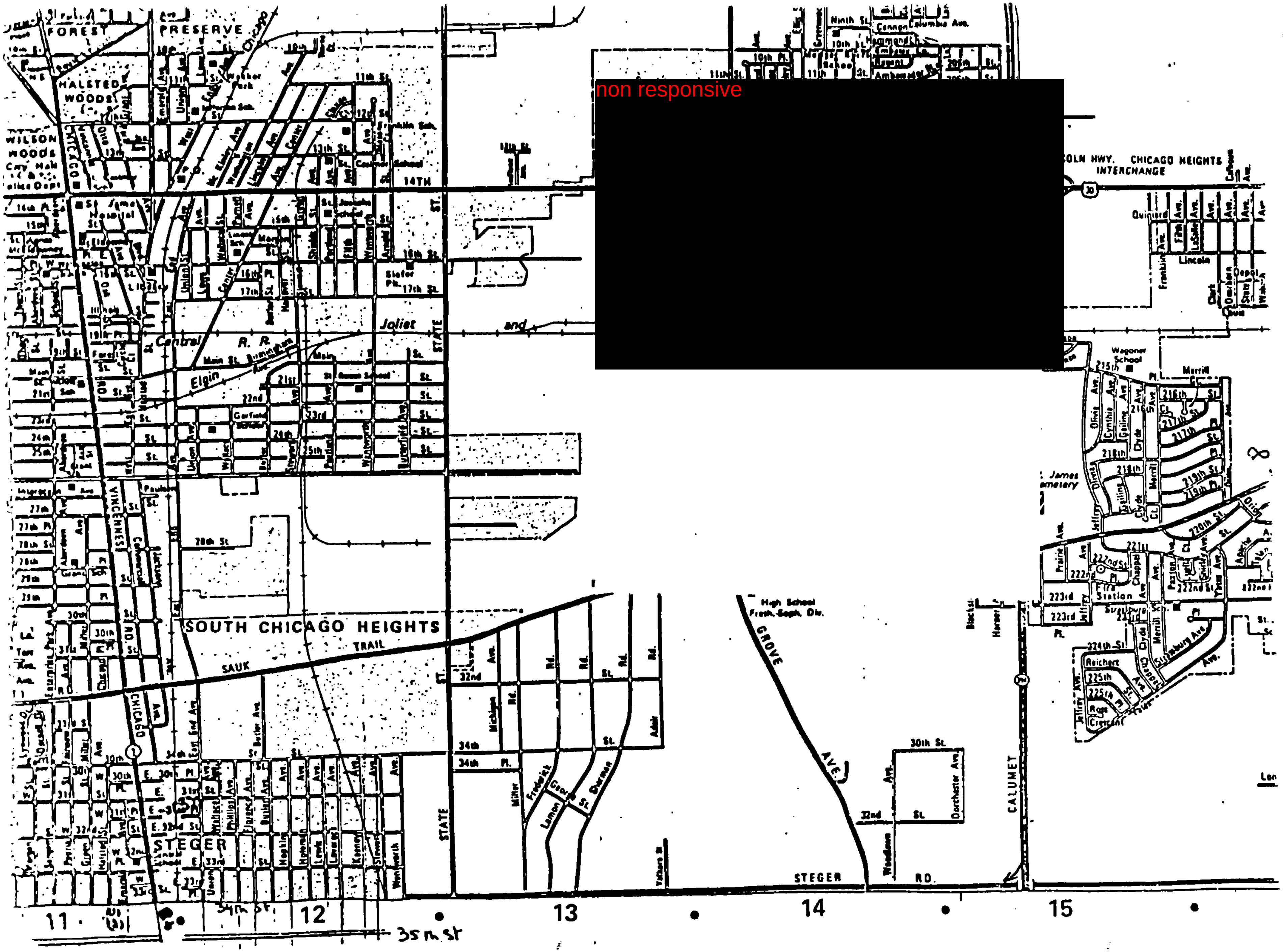
3. No recent mineral analysis of finished water.

4. Inaccurate reports Sept. & Oct.

Recommendation for improvement:

5. Summarize and report data on customer complaints, main breaks, well water levels, length of mains, etc.

Note: Field tested chlorine residual twice. It was greater than 1.1 mg/l. Village routine sampling reports indicate less than 0.5 mg/l.



FOREST
PRESERVE
HALSTED
WOODS
WILSON WOODS
non responsive
[redacted]
CHICAGO HEIGHTS INTERCHANGE
14TH
Central R. R.
Elgin
Joliet
and
SOUTH CHICAGO HEIGHTS
SAUK
TRAIL
VINCENNES
CHICAGO
STATE
STEGER
STEGER
RD.
GROVE
AVE.
CALUMET
High School Fresh.-Soph. Div.
Wagoner School
Lincoln
11
12
13
14
15
35th st

SUMMARY OF MONITORING Steger PUBLIC WATER SUPPLY

PUMPING CAPACITY AND WATER LEVELS ---- SOURCES

Year									
Quarter									
Well or Intake # 1 Location [redacted] above sea level									
Gpm. 350									
Nonpumping Level 413'									
Pumping Level									
Pump setting									
Casing seat & T.D. 12" set at 147' 318'									
Specific Capacity									
Well or Intake # 2 Location [redacted]									
Gpm. 618									
Nonpumping Level 65'									
Pumping Level									
Pump setting									
Casing seat & T.D. 16" set at 60' 378'									
Specific Capacity									
Well or Intake #3 Location [redacted]									
Gpm. 750									
Nonpumping Level 31'									
Pumping Level									
Pump setting									
Casing seat & T.D. 12" set at 110' 325'									
Specific Capacity									
Well or Intake # Location Elevations									
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									
Specific Capacity									
Well or Intake # Location Elevations									
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									
Specific Capacity									

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF PUBLIC WATER SUPPLIES

Facility No. 016 279 0 PUBLIC WATER SUPPLY DATA SHEET

County and Supply SAUK VILLAGE Cook County

Date Inspected April 17, 1981 Plant phone 758-1936

Operator Ed Nieft, #2560 *B* Phone 758-0430 (office)

Other officials (Title) Phone 758-3330 (village)

Edward Pasel Phone

Emergency Address 2217 - 220 Street Phone 758-5960 (police)

Send mail to Village Hall, 21701 Torrence Avenue, Sauk Village, Illinois 60411

Interviewed Ed Nieft and Dennis Keane

Brief description of supply: Water obtained from two drilled wells, treated with chlorine, fluoride, and polyphosphate, and discharged to one ground reservoir and one elevated tank. Four high service pumps take suction from the reservoir, supply the system and the elevated tank. Well #3 is not in service yet. Scheduled to be in service within the next 30 days.

No. of services: Direct 2800 - 100 % metered

Satellite - % metered

Adequacy of Supply

Annual Pumpage 323 M Gal. 1980
Av. Daily pumpage 0.89 M Gal. Max. av. Daily Pumpage 1.58M Gal.
Est. Population 10,906 Av. Daily per Capita Consumption 82 Gal.
Time Required to Produce Av. Daily Consumption Hrs.
Time Required to Produce Mx. Av. Daily Consumption Hrs.
Large Consumers None Av. Gal./Day

Emergency water and Power Sources: Well No. 2 - Amarillo right Angle Drive, V8 Natural Gas Engine
Well No. 3 - Amarillo right angle drive Diesel eng

CRB:ted
PWS 59 7/79

VENTORY	Wells & Pumps	Standby Power	Feeder Mains	Add Chlorine	Add Fluoride	Add Phosphate	Exchange	Removal	Flushing Hydrants	Backflow preventor	Clear Wells	High Ser. Pumps	Standby Power	Mains - 1000s ft.	Interconnections	Elevated Tanks	Pressure Storage	Ground Storage	Booster Pumps	Standby Power	Distribution Valve	Hydrant Valves	Service Connection	Service Meters
ail in "CSOM"																								
ber of Units	3	2	--	2	2	3	--	--	423		1	5	1		--	1	--	--	--	--		423	2.8K	2.8K

Well Capacity:

#1	660 gpm	
#2	1000 gpm	-gasoline engine
#3	1000 gpm	-diesel engine
#4	gpm	
#5	gpm	
#6	gpm	

HSP Capacity

#1	150 gpm	
#2	250 gpm	
#3	660 gpm	
#4	1000 gpm	gasoline
#5	750 gpm	engine
#	gpm	

Total Well Capacity 3.83 M gpd.
Total Storage Capacity 0.7 gal.
Iron Filter Capacity --- gpd

High Service Pump Capacity 4.05 M gpd
Elevated Storage 0.4 M gal.
Pressure Storage -- gal.
Ground Storage 0.3 M gal.

Emergency Power: Auxiliary Power for Well #2, Well #3 and HSP #4.

In the course of the evaluation, the following conditions which appear to constitute violations of the Environmental Protection Act or related public water supply rules and regulations were noted:

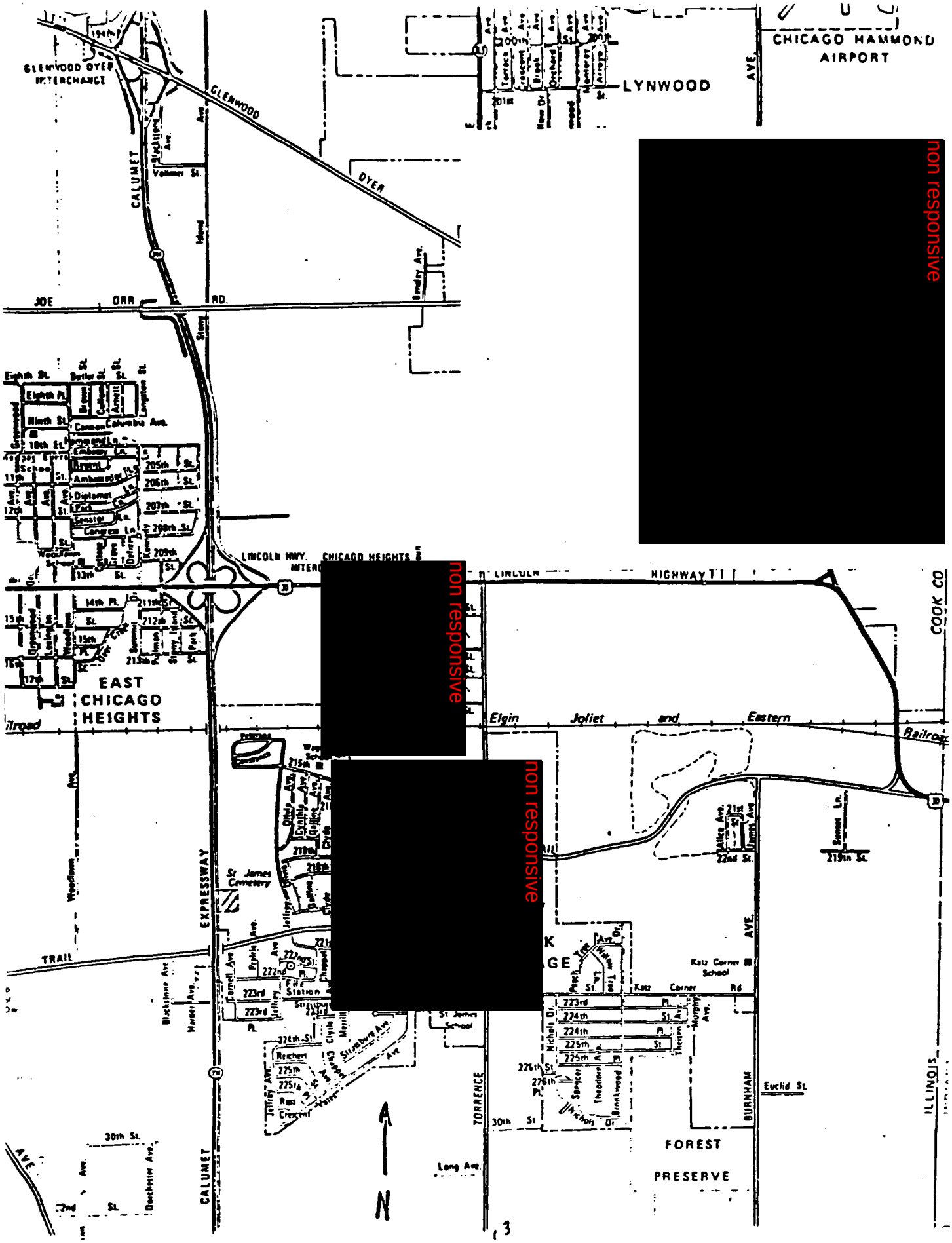
1. No screens on a. overflow for 0.3 MG reservoir
   b. Well #1 - air vent

2. Fluoride fed not reported on monthly operating reports.

3. Fluoride and chlorine injected at wells #1 and #2 are not flow proportioned.

4. Inadequate number of raw samples submitted.

PUBLIC WATER SUPPLY


GLENWOOD OVER INTERCHANGE
GLENWOOD
OYER
CALUMET
JOE ORR RD.
LYNWOOD
CHICAGO HAMMOND AIRPORT
AVE.
non responsive
non responsive
non responsive
LINCOLN HWY.
HIGHWAY
COOK CO
EAST CHICAGO HEIGHTS
Elgin Joliet and Eastern Railroad
EXPRESSWAY
St James Cemetery
TRAIL
TORRENCE
BURNHAM
Euclid St
ILLINOIS
FOREST PRESERVE
Long Ave.
30th St
N

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF PUBLIC WATER SUPPLIES

Fac. No. 0164740 PUBLIC WATER SUPPLY DATA SHEET

County and Supply PARK FOREST Cook County

Date Inspected November 12 and 20, 1981 Plant phone 748-5346

COIRC *A* #5016 "T"

Operator Marvin Bartling, Chief Water Plant Opera. Phone 748-1112 (Village Hall)

Other officials (Title) J. Gericke, Dist. Supt. Phone

Mr. Blaine Osterling, Supt. of Public Works Phone

Mr. Robert Pierce, Village Manager

Emergency Address Treatment Plant Phone 748-5346

Send mail to Village Hall, 200 Forest Blvd., Park Forest, Illinois 60466

Interviewed Marvin Bartling, Chief Water Plant Operator

Brief description of supply: Water obtained from seven (7) drilled wells. Water from Wells #1 - #6 is aerated, lime-sodium aluminate softened, treated with phosphate, recarbonated, filtered, zeolite softened, chlorinated, fluoridated and discharged to a clear well or ground reservoir. Six (6) high service pumps take suction form the clearwell and discharge to the system upon which one elevated tanks floats. Well #7 is zeolite softened, treated with caustic soda, chlorine, fluoride and discharged to the system.

No. of services: Direct 8605 - 100 % metered

Satellite - % metered

Adequacy of Supply

Annual Pumpage 894 M Gal. 1980

Av. Daily pumpage 2.44 M Gal. Max. av. Daily Pumpage Gal.

Est. Population 26,222 Av. Daily per Capita Consumption Gal.

Time Required to Produce Av. Daily Consumption Hrs.

Time Required to Produce Mx. Av. Daily Consumption Hrs.

Large Consumers None Av. Gal./Day

Emergency water and Power Sources: Inter-connection Chicago Heights, Olympia Fields

CRB:ted
PWS 59 7/79

INVENTORY	Wells & Pumps	Standby Power	Feeder Mains	Add Chlorine	Add Fluoride	Add Phosphate	Exchange Zeolite softening	Removal (Filter rapid sand)	Flushing hydrants	Backflow preventor	Clear Wells	High Ser. Pumps	Standby Power	Mains - 1000s ft.	Interconnections	Elevated Tanks	Pressure Storage	Ground Storage	Booster Pumps	Standby Power	Distribution Valve	Hydrant Valves	Service Connection
etail in "CSOM"																							
umber of Units	7	2	--	2	2	2	6	4	742		2	6	2		2	1	--	--	--	--	497		

Well Capacity:

#1	1000	gpm	#7	800	gpm
#2	1000	gpm	#8	—	gpm
#3	1000	gpm	#9	—	gpm
#4	1000	gpm	#10	—	gpm
#5	2000	gpm	#11	—	gpm
#6	1000	gpm	#12	—	gpm

Total Well Capacity 11.232 gpd.
Total Storage Capacity 1.7 M gal.
Iron Filter Capacity _____ gpd

High Service Pump Capacity 12.4 gpd
Elevated Storage 0.5 M gal.
Pressure Storage — gal.
Ground Storage 1.2 M gal.

Emergency Power: Natural gas engine for Wells #3 and #5, HSP #1 and #2, and for the plant

Water system appeared to be generally satisfactory except:

a. Inadequate number of bacteriological samples submitted from distribution system.

b. Chlorine is not totally isolated at the water treatment plants.

non responsive
RICHTON PARK
PARK FOREST
STEGER
FOREST PRESERVE RD.
CHICAGO
Illinois Central R. R.
ONEE TOWNSHIP
WESTERN AVE.
CRAWFORD AVE.
Joliet
Central
Richton Community Hall
Camp Pompeii
St. Mary's
Sycamore Dr.
Maple Rd.
Oak Ln.
Acacia Ln.
Wisteria Ln.
Woodland Ct.
Blackhawk
Oakwood
Somonauk
Sauk
Dewey Ave.
Hamill Rd.
Hawthorne Ave.
Tonawanda
Tonkawa
Tomah
Tolono
Talola St.
Topeka St.
Kiowa
Indianola
Lawndale Ave.
Ridgeway Ave.
Richton Square
Milland Ave.
Central Park
Governors Hwy.
Jackson Ave.
Buchanan
Edward Dr.
Jackson Ct.
Regency Dr.
Victoria Dr.
York Ct.
Princeton Ct.
Square Park
Seneca
Somonauk Park
Blackhawk Schools
Oswego St.
Dr. Drive
Cahoon Cemetery
Western Ave.
Onee Township Trail
E. Arbor
Wood Rd.
Creek Dr.
Creek Ct.
Ashland
Crescent Dr.
Emerald Ave.
Parkwood Elementary School
Carpenter St.
Morgan
Sangamon
Peoria
Green
Halsted St.
Union
Lincoln
Wentworth
Aberdeen
Vincennes
Chicago Rd.
Interstate 57
Expressway
Entrance Park Ave.
La Terr Ave.
Ave.
Lincoln Ct.
Lincoln Dr.
Miller Ave.
Eastwood
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Ct.
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Blvd.
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Indianola
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Park
Seneca
Somonauk
Park
Blackhawk
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Creek
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School
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Kiowa
Indianola
Lawndale
Ave.
Ridgeway
Ave.
Richton
Square
Milland
Ave.
Central
Park

PUMPING CAPACITY AND WATER LEVELS ---- SOURCES

Year	1981					1982				1983
Quarter		1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st
Well or Intake # 1 Location	non responsive									
Gpm.	60									
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.		24" - 0 to 95'		16" - 0 to 116'			T.D 200'			
Specific Capacity										
Well or Intake # 2 Location	non responsive									
Gpm.	1000									
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.		24" - 0 to 88'		16" - 0 to 97'			T.D 300'			
Specific Capacity										
Well or Intake # 3 Location	non responsive									
Gpm.	1000									
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.		24" - 0 to 96'		18" - 0 to 117'			T.D. 350'			
Specific Capacity										
Well or Intake # 4	non responsive									
Gpm.	900									
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.		12" - 0 to 160'					T.D 345'			
Specific Capacity										
Well or Intake # 5 Location	non responsive									
Gpm.	1560									
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.		24" - 0 to 90'		18" - 0 to 101'			T.D 345'			
Specific Capacity										

SUMMARY OF MONITORING Park Forest PUBLIC WATER SUPPLY

PUMPING CAPACITY AND WATER LEVELS ---- SOURCES

Year	1980	1981	1982						
Quarter									
				Measurements as feet ~~above sea level~~					
Well or ~~Intake~~ # 6 non responsive [redacted]									
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.	20" - 0 to 102'		16" - 0 to 111'				T.D 361'		
Specific Capacity									
Well or Intake # 7 Location non responsive [redacted]									
Gpm. 1040									
Nonpumping Level 58'									
Pumping Level 183'									
Pump setting									
Casing seat & T.D.	26" - 0 to 96'		20" - 0 to 106'				T.D 402'		
Specific Capacity									
Well or Intake # Location				Elevations					
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									
Specific Capacity									
Well or Intake # Location				Elevations					
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									
Specific Capacity									
Well or Intake # Location				Elevations					
Gpm.									
Nonpumping Level									
Pumping Level									
Pump setting									
Casing seat & T.D.									
Specific Capacity									

FY 1981 21080

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY DIVISION OF PUBLIC WATER SUPPLIES

FAC. NO. 099 0300 PUBLIC WATER SUPPLY DATA SHEET

County and Supply CRETE Will County

Date Inspected September 26, 1980 Plant phone

Operator Edwin Gawczyuski #1860 *C* Phone 672-7100 (Water Dept.)

Other officials (Title) Ron Christopher, Village Phone 672-5431 (Village Hall)

President; Ron Bruner, Director of Public Works Phone

Emergency Address Phone

Send mail to Village Hall, 524 Exchange Street, Crete, Illinois 60417

Interviewed Edwin Gawczyuski, Water Superintendent

Brief description of supply: Water obtained from three (3) drilled wells, chlorinated, fluoridated and pumped to the distribution system upon which two elevated tanks float.

Ronald Bruner DPW

No. of services: Direct 1454 - 100 % metered

Satellite - % metered

Adequacy of Supply

Annual Pumpage 164.3M Gal.
Av. Daily pumpage 450,000 Gal. Max. av. Daily Pumpage Gal.
Est. Population 5,090 Av. Daily per Capita Consumption 88 Gal.
Time Required to Produce Av. Daily Consumption Hrs.
Time Required to Produce Mx. Av. Daily Consumption Hrs.
Large Consumers None Av. Gal./Day

Emergency water and Power Sources: None

CRB:ted
PWS 59 7/79

INVENTORY	Wells & Pumps	Standby Power	Meter Pits	Chlorine	Fluoride	Phosphate	Exchange	Removal	Flushing Hydrants	Backflow preventor	Water Wells	High Ser. Pumps	Standby Power	Miles - 1000s ft.	Interconnections	Elevated Tanks	Pressure Storage	Ground Storage	Booster Pumps	Standby Power	Distribution Valve	Plant Valves
Detail in "CSOM"																						
Number of Units	3			3	3											2						

Well Capacity:

#1	capped gpm	#7	gpm
#2	capped gpm	#8	gpm
#3	200 gpm	#9	gpm
#4	600 gpm	#10	gpm
#5	290 gpm	#11	gpm
#6	gpm	#12	gpm

Total Well Capacity 1.57 M gpd. High Service Pump Capacity gpd
Total Storage Capacity * 650,000 gal. Elevated Storage 650,000 gal.
Iron Filter Capacity gpd Pressure Storage gal.
*Two elevated tanks 150,000 & 500,000 gal. Ground Storage gal.

Emergency Power: Well #3 turbine pump can be belt driven by a tractor.

In the course of the evaluation, the following conditions which appear to constitute violations of the Environmental Protection Act or related public water supply rules and regulations or standards were noted:

User Complaints

1. Problems of hydrogen sulfide odor were reported to be occurring at the dead end areas of your system. We ask that you monitor the distribution system by checking chlorine residuals weekly and by keeping a record of customer complaints. Hydrants at dead end areas should be periodically opened at a moderate flow rate so that a good chlorine residual can be maintained by bringing in fresh water.

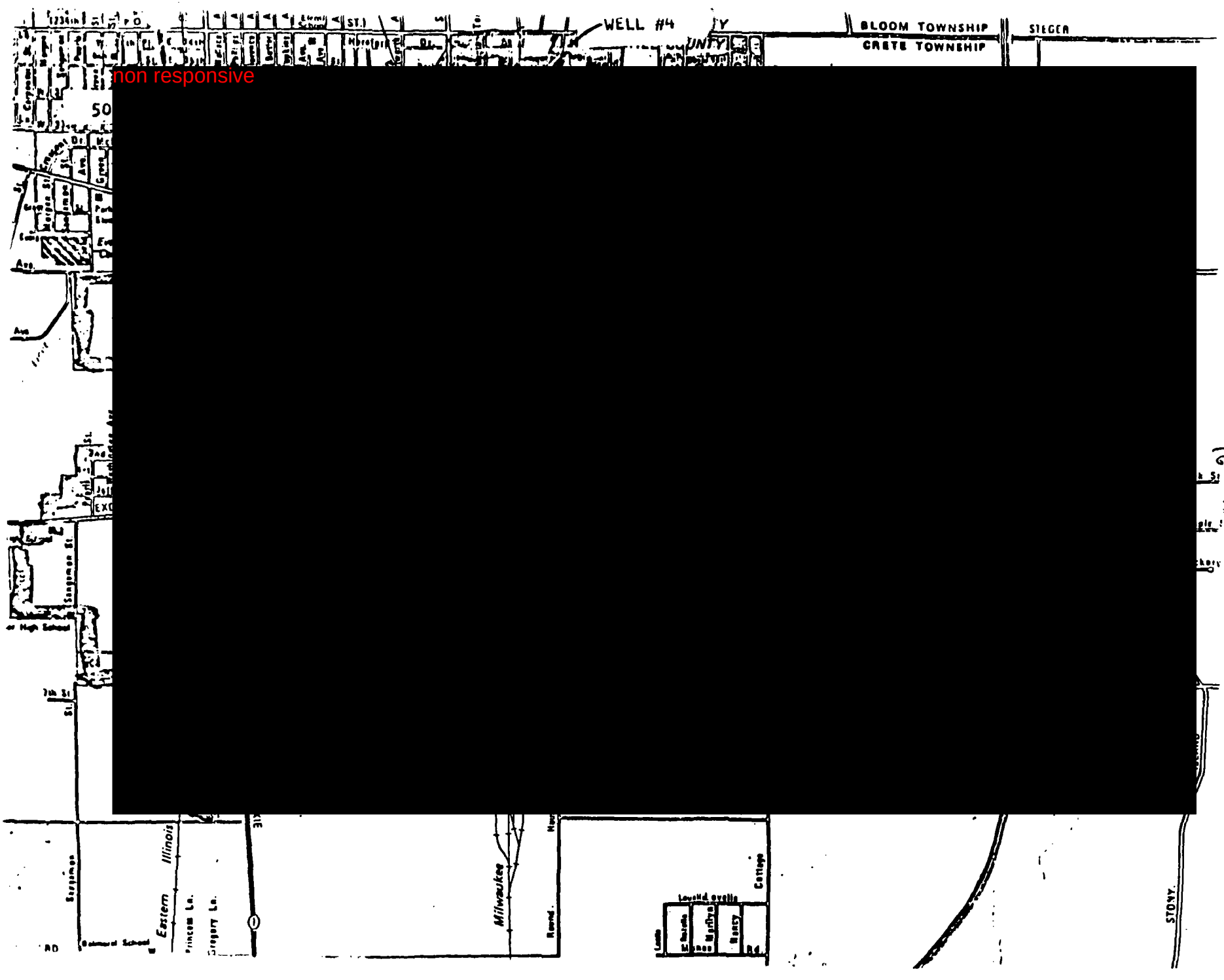
A well planned flushing program (performed at least twice a year) will also help eliminate the accumulation of mineral sediment in the system and reduce red water problems. You should also consider treating your water with polyphosphate to sequester the iron in the water. The iron concentration is approximately 1.0 mg/l.

MONITORING

2. Raw water samples are not regularly collected at Wells #3 and #4.
3. We have no recent mineral analysis data on file for Wells #4, #5 and the finished wate
4. With an increase in population to approximately 5,100 a minimun of 6 distribution samples should be collected.

RECOMMENDED IMPROVEMENTS

5. Summarize additional information (complaints,equipment failures,water levels) as part of your monthly operating reports. Also include the monthly hydrofluosilicic acid consumption for each well. Your records indicate that you seem to be feeding too little hydrc fluosilicic acid into the system (see summary attached). On the other hand laboratory results of fluoride water samples indicate higher values compared to the computed values.
6. We understand Wells #1 and #2 will not be usedagain and plans are underway to abandon them. Information and instruction concerning the approved procedure may be obtained from the Department of Mines and Minerals, Mr. Raymond Hibner, Elwood, Illinois 60421, telephone 815-423-5336. Please inform us when the work is completed so we can correct our records accordingly.


non responsive
WELL #4
BLOOM TOWNSHIP
CRETE TOWNSHIP
STEGER
Eastern Illinois
Princeton La.
Gregory La.
Milwaukee
Road
STONY

SUMMARY OF MONITORING Crete PUBLIC WATER SUPPLY

PUMPING CAPACITY AND WATER LEVELS --- SOURCES

Year		1982	1983	1984	1985	1986	1987	1988	1989	1990
Quarter		–	–	–	–	–	–	–	–	–
							Measurements as feet above sea level			
Well or Intake # 1 Location		non responsive								
1903	Gpm.									
	Nonpumping Level									
	Pumping Level									
	Pump setting									
	Casing seat & T.D.	10" Csg. (150') set @ ± 568'					Total Depth ± 527			(192'
	Specific Capacity									
Well or Intake # 2 Location		non responsive								
1928	Gpm.									
	Nonpumping Level	±679								
	Pumping Level	±647								
	Pump setting									
	Casing seat & T.D.	12" Csg (99') set @ ± 620 - 10" Liner					Total Depth ± 455			(264'
	Specific Capacity	9.9								
Well or Intake # 3 Location					Elevation					
	Gpm.									
	Nonpumping Level									
	Pumping Level									
	Pump setting									
	Casing seat & T.D.									
	Specific Capacity									
Well or Intake # 4 Location					Elevation					
1961	Gpm.									
	Nonpumping Level									
	Pumping Level									
	Pump setting									
	Casing seat & T.D.									
	Specific Capacity									
Well or Intake # 5 Location					Elevation					
	Gpm.									
	Nonpumping Level									
	Pumping Level									
	Pump setting									
	Casing seat & T.D.									
	Specific Capacity									

SUMMARY OF MONITORING Crete PUBLIC WATER SUPPLY

PUMPING CAPACITY AND WATER LEVELS ---- SOURCES

Dolomite

Year		1982	1983	1984	1985	1986	1987	1988	1989	1990
Quarter										
Well or Intake # 6 Location [redacted]										
1979 Gpm.										
Nonpumping Level	+666									
Pumping Level	+489									
Pump setting										
Casing seat & T.D.	12" csg. (123') set@ +600 Total depth +200 (520'									
Specific Capacity	3									
Well or Intake # Location Elevation										
Gpm.										
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.										
Specific Capacity										
Well or Intake # Location Elevation										
Gpm.										
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.										
Specific Capacity										
Well or Intake # Location Elevation										
Gpm.										
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.										
Specific Capacity										
Well or Intake # Location Elevation										
Gpm.										
Nonpumping Level										
Pumping Level										
Pump setting										
Casing seat & T.D.										
Specific Capacity										

non responsive

10"	Cemented in	0	55	SECTION PLAT
6"	Cemented in	0	86	300' S line, 50' E line, SE (Permit)

16. Size Hole below *casing*: 5-7/8 in.

17. Static level _____ ft. below casing top which is _____ ft. above ground level. Pumping level _____ ft. when pumping at _____ gpm for _____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Drift	50	50
Sand & Gravel	5	55
Lime	165	220
A. P. 56566		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Mehling Well Works, Inc., DATE 7-8-69

COUNTY NO. 998

COOK 30-35N-14E

Page 1 ILLINOIS GEOLOGICAL SURVEY, URBANA (6)

Studied by P. M. Busch 11/50	Thickness	Top	Bottom
PLEISTOCENE SYSTEM			
Till, calcareous, yellowish brown, weak	10		10
Till, calcareous, light yellowish brown, weak	30		40
Gravel to ¼", partly calcareous, gray, sandy & silty at base	15		55
Sand, fine to coarse, gray	5		60
Gravel to ½" (toward base), gray, clean	35		95
SILURIAN SYSTEM			
Niagaran Series			
Dolomite, silty, argillaceous, gray, some greenish gray, friable	110		205
Dolomite, silty, light gray & green, fine	25		230
Dolomite, silty, light gray to light brown, finely crystalline	20		250
Dolomite, light gray, light yellowish gray at base, fine	50		300 TD

COMPANY Milaeger Drlg. Co. NO.
FARM Park Forest Comm. NO. 2
DATE DRILLED 1947 COUNTY NO.
AUTHORITY Summary Sample Study
ELEVATION 700625' T.M.
LOCATION 1275' W. line, 1500' N. line of NW cor.
COOK S.S. #16187 30-35N-14

non responsive

Formations passed through	Thickness	Depth of Bottom
Clay Permit # 649	25	
Sandy Clay	20	45
Gravel	15	60
Dense	184	244
Shale	8	252
SS# 52907		
Received from Naperville Office. 5-23-66		

Finished in Rock [Continue on back if necessary] at 60 to 252 ft.

Cased with 6 inch Galv. Casing from 0 to 63½ ft.

and ____ inch ____ from ____ to ____ ft.

Size hole below casing 6 7/8 inch. Static level from surf. 70 ft.

Tested capacity 75 gal. per min. Temperature ____ °F.

Water lowered to ½ ft. ____ in. in ____ hrs. ____ min.

Length of test 3 hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

Formations passed through	Thickness	Depth of Bottom
Clay	0	40
Gravel	12	52
Shale	441	493
card made		
SS# 53986		
Received 2-22-67 from Naperville.		
S.S. #53986		

Finished in Rock [Continue on back if necessary] at 52 to 493 ft.

Cased with 15 inch Casing from 0 to 55' 10" ft.

and ____ inch ____ from ____ to ____ ft.

Size hole below casing 14 7/8 inch. Static level from surf. 103 ft.

Tested capacity ____ gal. per min. Temperature 52 °F.

Water lowered to ____ ft. ____ in. in ____ hrs. ____ min.

Length of test ____ hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

[Show location in Section Plat]

non responsive

AND MAIL ORIGINAL TO STATE DE-
OFFICE BUILDING, SPRINGFIELD,
ER SURVEYS SECTION. BE SURE TO

1/67

(8811—50M—6-69) 14

GEOLOGICAL WATER SURVEYS WATER WELL RECORD

non responsive

4½				LOCATION IN SECTION PLAT

16. Size Hole below casing: _____ in.
17. Static level 15 ft. below casing top which is _____ ft. above ground level. Pumping level _____ ft. when pumping at _____ gpm for _____ hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Drift	25	25
Dolomite	35	65
From SWS file		
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED Robert Vaasman DATE 2/6/85

17-35N-11E

Page 1

ILLINOIS GEOLOGICAL SURVEY, URBANA

Permit #14022

	Thickness	Top	Bottom
Soil, clay and stone	10	0	10
Sand and gravel	12	10	22
Gravel	15	22	37
Lime	28	37	65
Lime with shale	67	65	132
Lime	30	132	162
Lime with shale	14	162	176
Lime	235	176	411
Shale	1	411	412
Lime	18	412	430
Shale and lime	4	430	434
Shale	8	434	442
Total depth			442

Casing: 30" 0-37' . 24" 0-48'

S.S. #57789

non responsive

non responsive

[redacted]

Rock	10	60
Sand, yellow	5	65
Rock	5	70
Sand, yellow	10	80
Rock	8	88
Limestone, gray	17	105
Limestone, broken, shale	34	140
Rock	20	160
Limestone, gray	140	300

88' of 24" O.D. ~~steel~~ pipe
22" hole to 97'
97' of 16" O.D. pipe
15" hole to bottom at 300'
Non-pumping level - 60'
No yield data available yet.
This well 150' S. of E.J.& E., R. R. Passing trains cause water level fluctuation at 0.04' of type similar to Savoy well.

ORIGINAL FILED 1951

COUNTY Cook 30-35N-14E
SAMPLE SET NO. #16187

Strata	Thickness	Top	Bottom
Alexandrian Series			
Kankakee Formation			
Dolomite, buff to grayish buff, fine to very finely crystalline.	7		375
Dolomite, slightly silty, little silty, light buff to buff, little grayish buff to gray, fine to very finely crystalline, little medium crystalline, very pyritic, trace glauconite.	10		385
Dolomite, slightly silty, little silty, buff, little light buff to grayish buff, fine to medium crystalline, little very finely crystalline.	20		405
Edgewood Dolomite			
Dolomite, silty, brownish gray to grayish buff, little buff, fine to very finely crystalline, very speckled (black).	5		410 TD

Casing Record: 30" 0 - 66'
24" 0 - 72'

Hole Record: 30" 0 - 66'
24" 66 - 72'
23½" 72 - 413'

Wehling Well Works
COUNTY COOK S.S.# 41233 City of Chicago Heights #2
30-35N-14E

non responsive

ILLINOIS GEOLOGICAL SURVEY, URBANA

Permit issued October 1957	Thickness	Top	Bottom
Total depth			450
Casing: 30" outside diameter 0-32' 20" outside diameter 0-67' Size of hole below casing 20" 67-450' Static level 13' on May 8, 1958 Drawdown 148' after pumping at 435 gallons per minute for 30 hours. On April 8, 1960 Static level 15' Drawdown 181' after pumping 500 gallons per minute for 3 hours.			
Drift	25	0	25
Limestone	425	25	450

NO ENVELOPE

non responsive

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Drift	33	33
Rock	167	200
*Commercial operation (Maintenance Bldg.)		

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Wehling Well Works, Inc. DATE 8-31-71

COOK

COUNTY No. 1332

26-35N-14E

non responsive

[redacted]

[Continue on back if necessary]

Finished in 17' Jack at 94 to 111 ft.

Cased with 4 inch galv. well casing from 0 to 94 ft.

and inch from to ft.

Size hole below casing 3 15/16 inch. Static level from surf. 40 ft.

Tested capacity 12 gal. per min. Temperature 52 °F.

Water lowered to no drawdown ft. in. in hrs. min.

Length of test 3 hrs. min. Screen

[Continue on back if necessary]

Finished in 18' at 40 to 58 ft.

Cased with 4 inch galv. well casing from 0 to 40 ft.

and inch from to ft.

Size hole below casing 3 5/16 inch. Static level from surf. 4" ft.

Tested capacity 1 gal. per min. Temperature 52 °F.

Water lowered to NO drawdown ft. in. in hrs. min.

Length of test 3 hrs. min. Screen

non responsive

[redacted]

non responsive

[redacted]

Quicksand, muddy	27	75
Clay, hard, sandy, blue	15	90
Limerock	12	102

NO ENVELOPE

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	galv. seamless	+1	91

SHOW LOCATION IN SECTION PLAT

16. Size Hole below casing: 4-7/8 in.
17. Static level 120 ft. below casing top which is ______ ft. above ground level. Pumping level 120 ft. when pumping at ______ gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	89	89
Lime	91	180

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED W. E. Welling DATE June 9, 1977

COUNTY NO. 25606

COUNTY Cook
DRILL RECORD

INDEX NO. 1JJ2819
19-35N-14E

(15000—30M) ILLINOIS GEOLOGICAL SURVEY, URBANA (12-41)

COOK

19-35N-14E

recycled paper

R SURVEYS SECTION. BE SURE TO

non responsive

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
5	Finished Steel	0	78
	Galv. Casing, 15 lb.		
	per ft.		

SHOW LOCATION IN SECTION PLAT
E/2 SW
(Permit)

16. Size Hole below casing: 5 in.
17. Static level 45 ft. below casing top which is 1 ft. above ground level. Pumping level 48 ft. when pumping at 15 gpm for 1 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Soil	1	1
Yellow Clay	14	15
Blue Clay	32	47
Sand & Gravel	22	69
Blue Clay	7	76
Gravel	2	78
Limestone	72	150
(CONTINUE ON SEPARATE SHEET IF NECESSARY)		

SIGNED H. Hallaman DATE Nov. 15, 1971

COUNTY No. 1476

COOK

18-35N-14E

STATE OFFICE BUILDING, SPRINGFIELD,
CAL/WATER SURVEYS SECTION. BE SURE TO

GEOLOGICAL AND WATER SURVEYS WELL RECORD
Completed 1-9-73

non responsive

16. Size Hole below casing: 4-7/8 in. SW (Permit)
17. Static level 78 ft. below casing top which is ft. above ground level. Pumping level 78 ft. when pumping at 15 gpm for 3 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Clay	30	30
Sand & Gravel	15	45
Gravel	27	72
Lime	89	161

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Wehling Well Works, Inc. DATE 1-22-73

COUNTY No. 1286

COOK

18-35N-14E

recycled paper

REQUESTED AND MAIL ORIGINAL TO STATE
:AU OF ENVIRONMENTAL HEALTH, 535 WEST
01. DO NOT DETACH GEOLOGICAL/WATER
E PROPER WELL LOCATION.

LOG OF WATER WELL

GEOLOGICAL AND WATER SURVEYS WELL RECORD

non responsive

[redacted]

(Continue on back if necessary)

Finished in 35' rock at 56 to 91 ft.

Cased with 5 inch Galv. Well Casing from 0 to 56 ft.

and ____ inch ____ from ____ to ____ ft.

Size hole below casing 4 7/8 inch. Static level from surf. 30 ft.

Tested capacity 17 gal. per min. Temperature 57 °F.

Water lowered to no draw down in. at ____ hrs. ____ min.

Length of test 3 hrs. ____ min. Screen ____

Slot ____ Diam. ____ Length ____ Bottom set at ____ ft.

non responsive

[redacted]

17. Static level 72 ft. below casing top which is ____ ft. above ground level. Pumping level 72 ft. when pumping at ____ gpm for 3 hours. Sub. pump set at 105'.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Black dirt	1	1
Clay	24	25
Muddy Sand	25	50
Gravel	22	72
Lime	109	181

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Wendell Welling Jr. DATE ~~IEX~~ 11/4/76

BOOK

COUNTY No. 25338 [illegible]

18-35N-14

APPENDIX C

REFERENCE DOCUMENTATION

ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE

CONTACT	COMPANY or AGENCY	POSITION
Chicago Heights Water Dept.	CHWD	

CONTACT ADDRESS	CONTACT PHONE NUMBER
	1-708-756-5380

E&E EMPLOYEE	DATE	TIME
Patrick Cole	Sept. 8, 1985	6:45 p.m.

PROJECT NUMBER	SITE NAME and LOCATION
	Steel City National Bank Chicago Heights, Ill.

DISCUSSION

Chicago Heights utilizes Lake Michigan water, East Chicago Heights " wells.
South " " " " "

SIGNATURE

Patrick Cole

PAGE ____ OF ____

ecology and environment, inc.
CHICAGO, ILLINOIS

TELEPHONE LOG

REFERENCE

CONTACT	COMPANY or AGENCY	POSITION
Park Forest Village Office	PFVO	

CONTACT ADDRESS	CONTACT PHONE NUMBER

E&E EMPLOYEE	DATE	TIME
Patrick Cole	Sept. 11, 1995	10:25 a.m.

PROJECT NUMBER	SITE NAME and LOCATION
	Steel City National Bank Chicago Heights, Ill.

DISCUSSION

Park Forest uses wells.

SIGNATURE

Patrick Cole

PAGE ____ OF ____